

CLIMATOLOGICAL DATA FOR OCTOBER, 1913.

DISTRICT NO. 12, COLUMBIA VALLEY.

EDWARD A. BEALS, District Editor.

October this year as respects weather was much like the same month a year ago, being cooler than usual, with a slight excess in precipitation. There were no very low or very high temperatures recorded. Snow fell in many places earlier than usual, and some sheep were blockaded in their mountain pastures. They were released and driven to lower and warmer levels with difficulty. By the end of the month most of the snow had disappeared, except near the summits of high mountains. There was enough rain to lay the dust in country roads which facilitated the hauling of produce to railway terminals. The rains also kept pastures in good condition, and consequently range stock are well fitted to endure the hardships of the winter months. Farm and construction work as well as railway traffic suffered little or no interruption on account of bad weather.

TEMPERATURE.

October was cooler than usual in practically every portion of the district, particularly so in the eastern section, where the temperature ranged from 2° to more than 6° below the normal.

The mean temperature of the district, as determined from the records of 281 stations, was 46.6° , which was 2.2° below normal. The highest temperature, 94° , was recorded on the 9th at Paisley, Oreg., at an elevation of 4,209 feet, and the lowest temperature, 5° , occurred at Whitaker, Oreg., on the 25th, and Imperial, Oreg., on the 29th, both at altitudes of over 4,000 feet. The greatest daily range in temperature, 65° , was at Powell Butte, Oreg., at 3,240 feet elevation. The highest monthly mean, 56.8° , was at Brookings, on the Oregon coast, and the lowest, 35.4° , was recorded at Pleasant Valley, Mont., at 3,500 feet elevation.

The following table shows for comparative purposes the mean temperature and departure from normal for the States of Oregon, Washington, and Idaho, and those portions of Montana and Wyoming in district No. 12 for the month of October during the last five years:

Years.	Oregon.		Washington.		Idaho.		Montana.		Wyoming.	
	Mean.	Depart. ure.	Mean.	Depart. ure.	Mean.	Depart. ure.	Mean.	Depart. ure.	Mean.	Depart. ure.
1909.....	52.1	+0.3	50.3	0.0	47.7	+1.2	45.3	+2.1	40.1	-0.3
1910.....	52.9	+1.5	51.4	+1.2	48.2	+1.9	46.8	+2.0	42.1	+1.2
1911.....	51.2	-1.2	49.1	-0.7	44.7	-2.9	41.2	-3.1	36.2	-3.6
1912.....	46.6	-5.4	46.8	-3.0	43.0	-3.6	40.9	-4.1	37.2	-2.7
1913.....	48.8	-1.7	47.4	-2.4	44.5	-2.2	41.1	-3.1	38.1	-2.5

PRECIPITATION.

The precipitation was considerably above the average in southeastern and northwestern Washington and along the central Oregon coast, the rainfall in Garfield and San Juan Counties, Wash., being the greatest in 23 years. Elsewhere the precipitation was normal or slightly above, except at scattered places in Idaho, western Washington, and northwestern and southern Oregon,

where in some instances it was nearly 2 inches less than the October average. There was more than the usual amount of snow in Idaho, and on the 6th occurred a fall of snow in the mountains and high valleys of Washington said to be the earliest ever recorded in October.

The average precipitation for the district, as computed from the records of 377 stations, was 2.51 inches, which was 0.43 of an inch above the normal. The greatest 24-hour rainfall, 5.21 inches, occurred at Golden Falls, Oreg., on the 7th, at an elevation of 700 feet. The greatest monthly amount, 12.88 inches, was recorded at Quinault, Wash., on the west slope of the Olympic Range, and no rain fell at Grand View, Idaho, and Valley Falls, Oreg. Snowfall to the depth of 29.1 inches was reported from Hat Creek, Mont., at an altitude of 6,000 feet.

The average monthly precipitation with departure from normal for the month of October during the last five years is shown in the following table for the States of Oregon, Washington, and Idaho, and for those portions of Montana and Wyoming in district No. 12:

Years.	Oregon.		Washington.		Idaho.		Montana.		Wyoming.	
	Mean.	Depart. ure.	Mean.	Depart. ure.	Mean.	Depart. ure.	Mean.	Depart. ure.	Mean.	Depart. ure.
1909.....	3.23	-0.41	2.60	+0.08	1.00	-0.15	0.90	-0.54	1.18	-0.90
1910.....	2.63	+0.35	3.72	+0.94	1.48	+0.23	2.39	+0.85	1.70	+0.24
1911.....	1.49	-1.55	0.91	-1.60	1.52	+0.30	1.72	+0.72	2.82	-0.93
1912.....	2.64	-0.29	3.17	+0.35	2.32	+1.36	1.48	+0.16	2.24	+1.40
1913.....	2.63	+0.41	3.32	+0.64	1.46	+0.04	1.57	+0.30	2.01	+0.78

THE RIVERS.

The Columbia River continued to fall during October, but streams in the Snake and Willamette Basins were higher than in September. Highest stages were reached on the 9th and 10th in the Willamette River and on the 12th and 13th along the lower Snake. The following table gives data for all river stations in this district from which reports were received:

Station.	River.	Highest. Date.	Lowest. Date.	Normal.	
				Mean.	Normal.
Albany.....	Willamette.....	5.1 9th.....	1.2 2d.....	2.2	1.5
Salem.....	do.....	5.8 8th.....	0.4 6th.....	1.8	0.8
Wilsonville.....	do.....	8.7 9th.....	1.4 3d.....	4.1	3.1
Oregon City.....	do.....	6.2 10th.....	0.9 6th.....	3.3	-----
Portland.....	do.....	4.8 1st.....	2.2 23d.....	3.4	2.6
Jefferson.....	Santiam.....	6.2 8th.....	0.9 5th.....	2.6	1.5
McMinnville.....	Yamhill.....	4.8 9th.....	0.4 6th.....	1.7	1.2
Cazadero.....	Clackamas.....	6.7 7th ¹	1.1 1st ¹	2.1	-----
Kamiah.....	Clearwater.....	4.6 25th.....	2.7 2d ¹	3.4	-----
Weiser.....	Snake.....	5.4 9th ¹	4.3 6th.....	4.9	3.8
Lewiston.....	do.....	3.5 12th.....	2.5 3d ¹	3.0	1.9
Riparia.....	do.....	4.3 13th.....	2.5 1st.....	3.6	2.6
Bonner Ferry.....	Kootenai.....	3.4 1st.....	1.9 31st.....	2.6	2.2
Newport.....	Pend Oreille.....	0.1 1st ¹	-0.2 9th ¹	-0.1	-0.4
Northport.....	Columbia.....	0.0 1st.....	-2.7 31st.....	-1.7	-2.0
Wenatchee.....	do.....	9.0 1st.....	6.9 31st.....	7.7	7.8
Umatilla.....	do.....	4.5 14th ¹	3.9 30th ¹	4.1	3.3
The Dalles.....	do.....	6.1 4th.....	4.5 31st ¹	5.3	4.4
Cascade Locks.....	do.....	4.3 1st.....	3.0 25th.....	3.4	3.1
Vancouver.....	do.....	3.7 1st.....	1.8 23d.....	2.8	2.7

¹ The stage was observed on more than one date.

MISCELLANEOUS PHENOMENA.

The prevailing winds were from the west, and while high on several dates caused little damage, except in a few orchards where fruit was still ungathered. Maximum velocities above 40 miles an hour were reported as follows: Seattle, 42 miles, south, on the 13th; Tatoosh Island, 50 miles, east, on the 25th, and North Head, 66 miles, south-east, on the 12th.

Thunderstorms occurred at several stations in eastern Oregon on the 12th and 13th, in some instances accompanied by hail.

Sleet caused some injury on the 6th in Washington.

The cooperative observer at Lakeside, Wash., reported an earthquake at 4.45 a. m. on the 14th.

Solar halos were observed at Baker, Oreg., on the 4th, 5th, and 25th, and at Portland on the 29th, and an aurora at Clear Lake, Oreg., on the last-named date.

TABLE 1.—Climatological data for October, 1913. District No. 12, Columbia Valley.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.					Precipitation, in inches.					Sky.	Prevailing wind direction.	Observers.			
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall unmeted.	Number of rainy days.	0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.
Montana.																			
Anaconda.....	Deer Lodge.....	5,330	11	39.4	-5.2	76	2	14	28	38	1.20	+0.34	0.30	9.4	7	13	11	7	
Butte.....	Silver Bow.....	5,716	18	38.5	-5.3	70	1†	14	23	37	0.65	+0.27	0.30	7.6	5	14	5	12	
Columbia Falls.....	Flathead.....	3,100	17	40.6	-2.4	79	2	17	17	45	1.47	+0.22	0.33	4.6	8	10	3	18	
Como.....	Ravalli.....	3,750	4	44.5	-8.0	80	3	25	17	37	1.35	+0.44	0.44	4.0	8	10	10	11	
Dayton.....	Flathead.....	2,925	8	43.8	-5	75	22	15†	42	65	0.85	+0.35	0	0	13	12	10	4	
Deer Lodge.....	Powell.....	4,509	1								1.88	+0.50	11.0	9	7	11	13		
East Anaconda.....	Deer Lodge.....	5,500	7	38.7	-	74	2	16	28	32	0.51			6.7	6	8	11	7	
Fortine.....	Lincoln.....	2,975	7	38.8	-	76†	2	8†	31	50†	0.89			6.7	6	6	6	13†	
Hamilton.....	Ravalli.....	3,524	10	44.2	-2.4	79	2	24	15	37	0.92	+0.04	0.53	T.	6	11	1	19	
Hat Creek.....	Powell.....	6,000	3								2.97		0.72	29.1	13	3	17	11	
Haugen.....	Missoula.....	3,150	1	41.8	-	79	1	19	17	52	2.08	+0.44	0.7	12	7	13	11	sw.	
Heron.....	Sanders.....	2,261	1	42.2	-	76	2	22	17	45	1.99		0.39	T.	11	10	8	13	
Kalispell.....	Flathead.....	2,965	16	39.4	-3.1	78	2	19	15	45	1.29	+0.12	0.65	1.3	9	9	11	w.	
Libby.....	Lincoln.....	2,075	3	41.7	-3.8	77	2	15	31	49	0.79	-1.02	0.25	T.	9	9	11	se.	
Missoula.....	Missoula.....	3,225	34	42.4	-2.4	81	2	20	15	45	2.39	+1.23	0.83	13				U. S. Weather Bureau.	
Ovando.....	Powell.....	4,050	13	38.6	-1.5	75	3	13	17	46	1.92	+0.73	0.63	10.0	14			U. S. Forest Service.	
Philipsburg.....	Granite.....	5,273	9	40.9	-2.7	79†	1†	14†	8†	51	2.02	+0.89	1.40	20.5	4	12	6	7†	
Plains.....	Sanders.....	2,473	14	43.4	-2.4	80	2	22	15	42	1.50	+0.72	0.40	2.0	10	8	8	15	
Pleasant Valley.....	Flathead.....	3,500	5	35.4	-	74	2	8	30	56	1.01		0.32	5.0	13	8	3	20	
Polson.....	do.....	2,920	5															A. D. Stillman.	
St. Ignatius.....	Missoula.....	2,911	7	43.6	-	80	2	20	15	47	1.97		0.71	T.	10	6	15	10	
Saltse.....	do.....	3,600	8										0.50	8.6	14	13	4	n.	
Stevensville.....	Ravalli.....	3,500	1	41.4	-	77	3	20	15	43	2.04		0.80	5.1	8	16	6	9	
Thompson Falls.....	Sanders.....	2,424	1	42.5	-	76	2	22	17†	44	2.01		0.40	T.	11	12	5	14	
Trout Creek.....	do.....	2,375	1															James Hylen.	
Victor Stock Farm.....	Ravalli.....	3,537	—															R. W. Fisher.	
Willow Glen.....	Deer Lodge.....	5,064	2	41.4	-	75	4†	9	27	55						15	2	14	
Wyoming.																			
Afton.....	Lincoln.....	6,200	9	39.2	-	73	2	13	29	45	1.73		0.60	9.0	8	13	6	12	
Alta.....	do.....	6,500	3	36.4	-	71	1	6	26†	46	1.59		0.40	21.4	6	10	7	14	
Bechler River.....	Yellowstone Park.....	6,500	1								2.41		0.98	24.1	7	12	10	9	
Bedford.....	Lincoln.....	5,900	13	38.6	-2.5	69	2	15	26†	41	2.30	+0.78	0.55	8.0	11	15	4	w.	
Moran.....	do.....	6,770	1															U. S. Reclamation Service.	
Snake River.....	Yellowstone Park.....	7,000	7															U. S. Army.	
Nevada.																			
San Jacinto.....	Elko.....	8	42.0*			75*	2	8*	29	57*	0.60		0.57	0.1	3				F. W. McEntire.
Utah.																			
Standrod.....	Boxelder.....		45.2	-		75	2	19	28	34	1.45		0.55	1.5	4	23	4	4	sw. T. B. Jones.
Idaho.																			
Albion.....	Cassia.....	4,650	10								2.44		1.42		2	24	6	1	w. C. E. Bocock.
Almo.....	do.....	3																Wm. D. Cahoon.	
American Falls.....	Power.....	4,341	21	44.4	-1.8	80	1†	24	5†	54	0.84	+0.36	0.39	0	4	23	8	0	Geo. Stoll.
Arrowrock.....	Boise.....	3,100	1	49.4	-	83	2	24	15	43	2.80		1.89	0.8	9	20	6	5	w. U. S. Reclamation Service
Blackfoot.....	Bingham.....	4,503	17	42.8	-2.5	78	2	15	26	48	0.43	+0.73	0.20	1.2	3	15	13	3	sw. E. A. Dowd.
Blackfoot Dam.....	Bannock.....	6,200	3	39.2	-	74	2	15	26	44	1.27		0.38	14.0	6	11	8	12	s. C. Waddell.
Bogus Creek.....	Boise.....	4,200	4								2.99		1.86	4.5	6	12	16	3	F. P. Ingraham.
Boise.....	Ada.....	2,739	27	45.0	-2.3	75	12	29	15	32	1.67	+0.39	1.31	T.	6	13	7	11	U. S. Weather Bureau.
Boise King.....	Elmore.....	41.6				76	2	17	15	49	1.93		0.76	4.0	7	12	4	8	A. W. Stevens.
Bonners Ferry.....	Bonner.....	1,850	6	40.2	-	65	1	20	31	35	0.36		0.26	0.4	19	6	6	6	W. H. Heideman.
Boulder Mine.....	Boise.....	4,800	3								2.54		1.74	7.8	9	17	4	10	Patrick Moriarty.
Buhl.....	Twin Falls.....	3,800	6	47.8	-	77	2†	24	29	40	0.43		0.25	T.	3	12	16	3	S. C. Orr.
Caldwell.....	Canyon.....	2,373	8	47.4	-	81	1	22	29	45	1.24		0.81	0	4	6	21	4	w. Wm. J. Boone.
Caldwell Exp. Sta.....	Canyon.....	1		43.9	-	79	3	18	29	45	1.40		1.10	0	6	6	4	C. B. Hampson.	
Cambridge.....	Washington.....	2,651	17	45.2	-3.4	80	2	20	29	48	1.16	+0.89	1.92	0	4	14	11	6	C. H. Shepherd.
Cedar Creek Dam.....	Twin Falls.....	5,220	2															Robert Hoffmann.	
Challis.....	Custer.....																	J. A. Harrington.	
Chesterfield.....	Bannock.....	5,424	16	40.7	-0.1	76	2†	10	26	52	1.06	+0.04	0.34	1.5	6	10	14	7	w. C. S. West.
Clarks Fork.....	Bonner.....	2,084	1	43.1	-	68	2	23	30	30	2.52		0.87	0	12	5	12	14	Wm. Potter.
Coeur d'Alene.....	Kootenai.....	2,157	18	47.4	+0.5	75	1†	27	25†	34	2.84	+1.02	0.75	0	10				J. H. O'Rourke.
Council.....	Adams.....	3,059	1	45.0	-	78	2	24	15†	47	2.57		2.25	4.0	6	11	4	16	F. L. Featherston.
Culdesac.....	Naz Perce.....	1,520	4	45.8	-	77	2	23	15	39	2.15		0.58	0	11	13	9	Mrs. B. B. Caldwell.	
Deary.....	Latah.....	2,854	1															W. J. Davis.	
Dent.....	Clearwater.....	1,350	7	42.9	-	76	2	22	28	42	2.64		0.77	0.5	8	12	5	14	Emil Schuessler.
Driggs.....	Fremont.....	6,097	6								3.15		1.70	13.5	6	6			W. H. Durrant.
Emmett.....	Canyon.....	2,350	6	47.8	-	78	2	24	15†	41	1.16		0.88	0	3	14	13	4	nw. U. S. Forest Service.
Forney.....	Lemhi.....	6,000	12															M. B. Merritt.	
Garnet.....	Elmore.....	2,575	13	52.0	-2.9	84	2	25	29	42	0.40	+0.47	0.30	0	2	21	5	6	A. A. Kenison.
Geneva.....	Bear Lake.....	6,171	4								1.37		0.52	T.	7	17	8	6	F. W. Boehme.
Glennc Ferry.....	Elmore.....	2,569	4	49.3	-	87	2	17	29	54	0.78		0.63	0	2	23	5	3	I. E. Perkins.
Gooding.....	Gooding.....	3,572	3	45.6	-	80	2	16	11	46	0.94		0.72	0	3	18	4	9	J. S. Welch.
Grace.....	Bannock.....	5,400	6															E. W. Joy.	
Grand Forks.....	Shoshone.....	3,000	3															Claget Sanders.	
Grandview.....	Owyhee.....	2,300	3	47.8*	-	79*	12	18*	29	53*	0.00		0.00	0	0				H. E. Hanna.
Grimes Pass.....	Boise.....	5,200	3								3.15		1.70	13.5	6				n.
Haffey.....	Boise.....	5,200	3								2.1								

TABLE 1.—Climatological data for October, 1913. District No. 12—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.			
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unsealed.	Number of rainy days 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.			
<i>Idaho—Continued.</i>																					
Kooskia.	Idaho.	1,261	4	45.8c	82c	3	25c	14	49c	2.00	1.00	0	9	10	14	4	13	sw.	U. S. Forest Service.		
Lakeview.	Bonner.	2,250	15	42.8	-3.2	64	2	25	30	24	3.40	+ 1.02	0.55	0	10	15	11	5	sw.	E. D. Faust.	
Landore.	Adams.	5,300	8	39.2	—	74	1	18	10	44	2.87	—	1.33	18.2	11	15	11	5	w.	Mrs. Emma L. Brown.	
Leadore.	Lemhi.	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Tom Keating.	
Lewiston.	Nez Perce.	757	19	48.6	-3.3	79	2	30	30	35	2.18	+ 0.98	0.70	0	9	9	6	16	w.	U. S. Weather Bureau.	
Little Camas.	Elmore.	5,000	3	—	—	—	—	—	—	—	1.51	—	0.82	8.0	6	5	16	10	w.	Solon McCoy.	
Loon Creek.	Custer.	6,000	3	37.8	—	78	3	11	15	60	0.89	—	0.28	T.	9	9	5	17	nw.	Mrs. Mary Williams.	
Mackay.	do.	5,897	5	42.3	—	72	2	18	27	41	T.	—	T.	0	20	9	2	9	nw.	U. S. Forest Service.	
Malad.	Oneida.	4,700	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Uther Jones.	
Meridian.	Ada.	2,657	2	47.4	—	78	2†	23	15	39	1.55	—	0.73	T.	6	10	14	7	nw.	A. W. Garrett.	
Mesa.	Adams.	3,275	2	46.5	—	77	2	27	15	36	2.06	—	1.77	T.	3	10	0	21	n.	I. S. Carter.	
Middle Fork.	Idaho.	1,397	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Jos. McGhee.	
Milner.	Twin Falls.	4,110	9	46.9	-1.2	78	2	22	28	47	0.91	-0.17	0.39	—	4	12	12	7	w.	James K. Young.	
Moore.	Blaine.	5,700	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Chas. B. Lemon.	
Moscow.	Latah.	2,748	20	43.8	-4.7	73	2	20	28	39	2.36	+ 0.68	0.60	T.	12	11	7	13	se.	University of Idaho.	
Mountainhome.	Elmore.	3,150	7	45.4	—	83	2	15	29	53	1.05	—	0.67	0	3	12	14	5	nw.	Mrs. Ellen Manion.	
Murtaugh.	Twin Falls.	6,462e	—	76e	—	22e	2	24e	26	37	1.08	—	0	0	20	7	4	w.	J. E. Steinour.		
New Meadows.	Adams.	3,930	8	38.9	—	76	1	12	14†	55	2.22	—	1.67	4.5	7	8	21	2	n.	Lee Highly.	
Nezperce.	Lewis.	3,082	3	41.6	—	75	2	22	15	40	1.91	—	0.68	T.	8	18	2	11	—	P. Mitchell.	
Oakley.	Cassia.	4,700	19	47.6	-1.4	80	2	20	28	39	0.97	+ 0.03	0.40	0	3	14	8	9	—	John Adams.	
O'Hara Bar.	Idaho.	1,557	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	J. D. Agnew.	
Orofino.	Clearwater.	1,027	8	46.9	—	81	2	26	28†	44	3.09	—	0.67	—	15	10	13	8	—	Geo. Alteneder.	
Paris.	Bear Lake.	5,946	18	41.4	-2.8	82	1	15	29	44	0.92	-0.12	0.30	2.0	6	17	11	3	w.	John Norton.	
Payette.	Canyon.	2,159	21	47.2	-3.7	80	2	20	29	46	0.92	+ 0.06	0.66	0	6	10	9	12	n.	E. F. Allen.	
Pierson.	Custer.	7,000	4	36.1	—	71	1	8	10	55	0.35	—	0.35	2.0	1	17	0	14	s.	D. P. Clarke.	
Pine.	Elmore.	4,100	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Mrs. Jennie Potter.	
Pleasant Valley.	Ada.	3,000	5	46.0	—	75	2	20	29	44	1.36	—	0.98	—	5	20	8	3	nw.	C. E. Friedrich.	
Pocatello.	Bannock.	4,483	13	45.8	-2.2	77	2	20	26	36	0.99	+ 0.01	0.37	1.3	8	11	9	11	se.	U. S. Weather Bureau.	
Pocatello Nursery.	do.	5,396	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Mrs. Fannie E. Say.	
Poplar.	Bonneville.	5,500	3	39.8a	—	68a	4	17a	26	33a	1.51	—	0.64	8.0	4	15	9	7	sw.	C. M. Lawrence.	
Porthill.	Bonner.	1,665	23	42.5	-2.5	67	1	19	31	32	0.57	-1.19	0.24	0	4	13	7	11	nw.	H. A. French.	
Priest River Experiment Station:																					
No. 1.	do.	2,500	1	39.7	—	63	3	22	31	34	1.68	—	0.49	0.5	10	7	9	15	sw.	U. S. Forest Service.	
No. 2.	do.	2,500	1	42.2	—	71	1	22	31	39	1.75	—	0.51	T.	10	7	9	15	e.	Do.	
No. 3.	do.	—	—	39.4	—	70	1†	15	31	40	1.74	—	0.49	0.5	10	7	9	15	se.	P. V. Smith.	
Pyle Creek.	Boise.	3,100	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Idaho Irrigation Co.	
Richfield.	Lincoln.	4,306	3	45.8a	—	78a	2†	21	15a	50a	0.65	—	2.45	3.0	5	20	6	5	s.	J. S. Bussell.	
Rogerson.	Twin Falls.	44.1†	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Rev. T. P. Graham.	
Roseberry.	Boise.	4,873	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	D. B. Hartwell.	
Roseworth.	Twin Falls.	4,650	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Will Parry.	
Rupert.	Minidoka.	4,204	6	45.6	—	78	2	17	29	45	0.64	—	0.33	—	4	14	7	10	sw.	Heber C. Sharp.	
St. Anthony.	Fremont.	4,968	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	J. S. Turnbull.	
St. Maries.	Kootenai.	2,263	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Rev. Father Berthold, O.S. B.	
St. Michael's Priory.	Idaho.	3,811	—	42.4	—	73	2	26	25	28	1.92	—	0.66	4.1	14	10	5	16	sw.	Rev. Father Berthold, O.S. B.	
Salmon.	Lemhi.	4,040	7	42.8	—	80	2	14	17	51	0.37	—	0.36	T.	2	16	9	6	nw.	E. K. Abbott.	
Sandpoint.	Bonner.	2,058	2	44.1	—	73	1	23	28	40	1.85	—	0.50	0	8	14	8	9	sw.	S. M. Moore.	
Sheep Hill.	Boise.	5,000	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	C. M. Gardner.	
Shoshone.	Lincoln.	3,968	5	45.2	—	79	14	19	15	53	0.54	—	0.42	T.	3	12	18	1	w.	Zell Truman.	
Silver City.	Owyhee.	6,280	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Russell Stoddard.	
Soldier Creek.	Blaine.	5,755	2	39.6	—	75	2	16	6	54	2.11	—	1.81	11.0	4	—	—	—	—	J. E. Minear.	
Spirit Lake.	Kootenai.	2,560	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	M. C. Krause.	
Spring Hill.	Bingham.	4,420	4	44.8	—	78	2	15	29	51	0.56	—	0.19	T.	5	12	12	7	sw.	Mrs. W. A. Edwards.	
Sugar.	Ada.	3,607	47.7	—	75	2	28	6	33	2.21	—	1.48	1.5	4	11	8	11	nw.	Ray G. Lyons.		
Fremont.	Fremont.	4,893	5	39.6	—	73	2	12	26	43	0.84	—	0.61	3.0	3	19	1	11	sw.	Utah-Idaho Sugar Co.	
Sunnyside.	Elmore.	3,500	3	42.4a	—	71a	24	20a	6	38a	1.32	—	0.87	T.	3	—	—	—	—	Col. M. W. Wood.	
Tripod Mountain.	Boise.	4,300	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Mrs. Verna Paddock.	
Twin Falls.	Twin Falls.	3,825	7	46.8	—	78	1	24	26	41	1.35	—	0.85	0	3	9	20	2	w.	J. A. Waters.	
Upper Lost River.	Custer.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	J. B. Howell.	
Vernon.	Fremont.	5,050	14	41.6	-2.1	73	1†	15	26	41	0.66	-0.62	0.17	5.0	6	10	13	8	sw.	A. M. Slattery.	
Wallace.	Shoshone.	2,728	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	U. S. Weather Bureau.	
Weiser.	Washington.	2,114	1	48.8	—	83	2	20	29	50	1.04	—	0.63	0	4	8	10	13	se.	J. W. Lapish.	
Wendell.	Gooding.	3,400	4	47.0	—	80	1†	20	15	45	0.78	—	0.64	T.	2	22	4	5	w.	Chas. L. Dingler.	
Weston.	Franklin.	4,460	14	44.8	-1.5	81	2	17	26†	46	1.18	-0.14	0.52	0	3	21	2	8	sw.	Wm. T. Chatterton.	
<i>Washington.</i>																					
Aberdeen.	Chehalis.	162	22	—	—	—	—	31	5	—	5.60	-1.25	1.30	0	13	12	7	12	sw.	H. A. Benham.	
Anacortes.	Skagit.	60	19	49.5	—	67	3	35	5†	26	4.75	+ 2.31	1.05	0	18	7	18	6	—	Douglass Almond.	
Anatone.	Asofia.	2,800	—	40.7	—	65															

TABLE 1.—Climatological data for October, 1913. District No. 12—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.								Precipitation, in inches.								Sky.	Prevailing wind direction.	Observers.			
				Mean.	Departure from the normal.	Highest.				Lowest.				Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days.	Number of clear days.	Number of partly cloudy days.	Number of overcast days.						
						Date.	Lowest.	Greatest.	Date.	Total.	Departure from the normal.														
Washington—Contd.																									
Ellensburg.	Kittitas.	1,571	25	44.6	—2.6	75	1	20	29	44	1.25	+ 0.73	0.55	T.	6	11	8	12	nw.	R. Lee Barnes.					
Eilotopia.	Franklin.	598	2								12.78		3.12	0	10						Frank O. Young.				
Forks.	Clallam.	480	2																	Ruth A. Palmer.					
Fort Simcoe.	Yakima.	1,427	19																	Richard Newmark.					
Gerome.	Stevens.	1,200	1	44.6		78	3	24	26	44	1.05		0.28	1.0	4	15	14	2		W. W. King.					
Goat Lake.	Snohomish.	2,900	4								10.99		4.19	9.5	15					C. M. Mackintosh.					
Gold Basin.	do.	1,360	2																	U. S. Forest Service.					
Gold Creek.	Yakima.	2,600	4								1.10		0.70	0	4	11	12	8	w.	John W. Anderson.					
Goldendale.	Klickitat.	1,600	7	48.4		79	1	21	29	44	1.70	+ 0.57	0.95	0	7	8	18	5	w.	Klickitat County Abstract Co.					
Granite Falls.	Snohomish.	397	10								8.06	+ 2.79	1.91	0	17	5	19		e.	C. H. Cleaver.					
Hanford.	Benton.	385	8	49.5		80	2	25	28	45	1.42		0.57	0	6	7	16	8	sw.	Frances Lee Bash.					
Hutton.	Adams.	1,100	8	46.6		79	2	20	28	47	1.29		0.52	0	7	6	8	17	sw.	A. V. Marion.					
Huntsville.	Columbia.	1,400	5								2.46		0.95	0	7					Mrs. S. J. Hill.					
Irene Mountain.	Okanogan.	2,700	4								1.35		0.49	6.3	9	12	5	14	n.	Mrs. Theo. Wheeler.					
Kennewick.	Benton.	368	18	50.6	—2.9	77	23	28	28	40	1.47		0	16	5	20	6		s.	R. E. Reed.					
Kent.	King.	53		50.0		68	1	31	5	30	3.17		0.88	0	15	4	7	20	s.	A. O. Jeffries.					
Kettle Falls.	Stevens.	1,285	4	44.4		75	1	21	29	46	1.21		0.72	0	7	17	7			Harry H. Cole.					
Kiona.	Benton.	430	7	52.0		81	4	27	28	43	1.37		0.76	0	5	22	3	6	sw.	Dr. F. S. Hedger.					
Knowlton near.	Okanogan.	3,800																	W. F. Jay.						
Kosmos.	Lewis.	775	7	49.3		75	1	30	51	38	7.35		1.47	0	16	5	20	6	ne.	J. A. Ulsh.					
La Center.	Clarke.	250	16	45.9	—4.7	73	1	26	5	35	5.05	+ 1.08	1.18	0	13	9	18	4	sw.	Joseph Brothers.					
La Crosse.	Whitman.	1,400	4	46.2		86	1	24	15†	53	1.90		0.75	0	9	17	3	11	s.	M. F. Schreck.					
Lake Clealum.	Kittitas.	2,171	4	44.2		74	1	21	28	41	4.26		1.20	0	12	7	22		nw.	U. S. Reclamation Service.					
Lake Kachess.	do.	2,235	5	43.8		74	1	28	30	40	3.65		1.10	11.0	14	6	5	20	w.	Do.					
Lake Keechelus.	do.	2,479	5	43.0		75	1	27	30	39	6.96		1.47	22.0	17	3	15	13	nw.	Do.					
Lakeside.	Chelan.	1,116	22	47.8	—3.2	75	2	27	29	32	0.12	+ 0.27	0.45	0	7	5	19	7	w.	W. H. Van Meter.					
Laurel.	Klickitat.	1,900	4								2.45		1.05	0.1	10	9	18	4	w.	Mrs. Minnie Strout.					
Laurier.	Ferry.	1,644	3	42.4		73	1	19	30	40	1.70		0.39	7.0	13	9	2	20	w.	Mrs. J. S. Myers.					
Lone Tree.	Chehalis.	9	4	51.6		62	1	41	16	13	6.79		1.83	0	17	4	20	7	sw.	U. S. Engineer Corps.					
Longmires Springs.	Pierce.	2,800	2	43.2		71	1	23	5	31	9.23		2.00	1.0	18					National Park Ranger.					
Lost Creek.	Okanogan.	3,125	4			77	2	24	28	41	0.80		0.35	0	6	17	4	10	n.	P. H. Leese.					
McConihe.	Grant.	1,072	2	47.4		77	2	24	28	41	0.73		0.40	0	7	15	12	4	se.	Lucien F. McConihe.					
McCumber's Ranch.	Yakima.	2,182	3																	Mrs. Mary McCumber.					
Moses Lake.	Grant.	1,070	22																	H. M. Flemming.					
Mottinger.	Benton.	307	13	52.6	—3.6	81	2	34	29	36	1.89	+ 1.04	0.58	0	9	19	9	3	n.	G. H. Mottinger.					
Mount Pleasant.	Clallam.	500	2	46.6		64	1	32	16	24	2.30		0.69	0	11	6	12	13	w.	Wm. Dorr.					
Moxee.	Yakima.	1,000	21	48.2	—1.8	79	1	21	28	46	1.03	+ 0.55	0.42	0	8	15	12	4	se.	H. B. Scudder.					
Newport.	Pend Oreille.	2,400	3	40.4		71	1†	20	25†	40	1.52		0.50	2.0	0	10	9	14	nw.	Chas. M. Talmadge.					
North Head.	Pacific.	211	11	52.0	—0.9	68	19	43	18	45	4.25	+ 0.34	1.12	0	16	9	10	15	nw.	U. S. Weather Bureau.					
Northport.	Stevens.	1,350	14	43.0	—1.4	73	1†	23	24†	44	1.36	+ 0.32	0.76	4.0	11	17	11	3	w.	W. F. Case.					
North Sundale.	Klickitat.	4	52.2			76	1†	30	36	47	0.56		0	5					n.	Ruth J. Shepard.					
North Yakima.	Yakima.	1,070	4	49.0		77	2	25	27	38	0.96		0.42	0	4	18	3	10	nw.	Albert Bender.					
Odessa.	Lincoln.	1,540	10	46.0		76	1	22	28	43	0.96		0.40	0	8	9	18	4	sw.	H. W. Rieke.					
Olga.	San Juan.	50	23	49.4	—0.5	61	2	35	29	38	5.28	+ 2.54	1.13	0	12	6	10	15	se.	Cecil S. Willis.					
Olympia.	Thurston.	45	35	49.8	—0.9	72	1	29	5	32	3.87	+ 0.56	0.77	0	11	2	20	9	sw.	State Commission of Agriculture.					
Ornak.	Okanogan.	850	4	45.8		80	2	20	28	45	0.57		0.22	T.	4	14	5	12	n.	Saint John Umbrite.					
Orovile.	do.	922	3	45.4		75	13	21	29	34	0.90		0.45	T.	5	18	10	3	n.	M. C. Jackman.					
Peoa.	Garnfield.	5,000	4								3.22		0.93	6.4	13	15	7	9	n.	Samuel Gruell, sr.					
Pomeroy.	do.	1,500	21	46.6		73	23	27	25	33	4.56	+ 3.30	3.30	0.78	0	12	19	10	w.	Peter McClung.					
Port Crescent.	Clallam.	259	18	45.9	—1.5	59	2	30	5	22	3.00	+ 0.47	0.86	0	17	3	11	17	se.	U. S. Weather Bureau.					
Port Townsend.	Jefferson.	80	23	48.8		67	3	35	6†	41	2.04	+ 0.45	0.77	0	12	10	4	20	nw.	Frank Plummer.					
Prosser.	Benton.	661		50.4		81	2	26	28	44	1.38		0.46	0	8	9	16	6	w.	E. L. Capps.					
Pullman.	Quinault.	2,550	21																	State Agricultural College.					
Quets River.	Jefferson.	16	2	50.0		66	1	33	27	44	9.09		2.10	0	16	10	7	14	nw.	C. A. Bullard.					
Quinalt.	Chenalis.	300	6	50.4		80	1	33	5	37	12.58		2.75	0	16	8	13	10	w.	A. V. Higley.					
Reardon.	Lincoln.	2,510	13	41.4	—5.3	69	3	24	29	39	1.32	+ 0.02	0.31	0.5	6	7	3	21	sw.	Chas. Shoemaker.					
Republic.	Ferry.	2,628	13	40.2	—3.4	72	1†	17	30	41	1.12	+ 0.08	0.48	4.0	10	12	6	12	nw.	Geo. B. Stocking.					
Rex Creek.	Chelan.	1,135	6																	James W. Nicol.					
Ritzville.	Adams.	1,825	14																	Agent N. P. Ry.					
Robertsville.	Klickitat.	667	14	43.4	—1.8	72	1	31	28	33	4.90	—0.14	1.05	0	22	8	3	20	w.	R. R. Couger.					
Rock Lake.	Whitman.	1,910	7																	H. C. Melcher.					
Rosalia.	do.	2,425	21	43.1	—4.3	70	1	26	29	37	1.50		0.50	0.54	0	12	10	11	10	sw.	Hanns Mumml.				
Russells Ranch.	Yakima.	2,870	4								2.58		0.96	6.6	12	13	9	9	w.	Mrs. Adella Russell.					
Seattle.	King.	248	22	50.1	—0.7	66	1	38	30	20	2.00	+ 0.88	0.64	0	14	2	11	8	se.	U. S. Weather Bureau.					
Sedro Woolley.	Skagit.	38	16	48.8		64	22	28	29	37	7.31	+ 2.94	2.00	0	17	9	8	14	n.	Mrs. H. L. Devin.	</				

TABLE 1.—Climatological data for October, 1913. District No. 12—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.			
				Mean.			Departure from the normal.			Greatest daily range.			Total.			Departure from the normal.					
				Highest.	Date.	Lowest.	Date.	Greatest.	Date.	Total.	Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.					
Washington—Contd.																					
Wilbur.	Lincoln.	2,203	14	2	47.0	75	1†	20	5	38	1.65	+ 0.50	0.52	7	12	7	12	R. J. Reeves.			
Wind River.	Skamania.	1,300	2	47.0	75	1	27	5	38	6.27	0.45	0	14	9	8	14	W.				
Winthrop.	Okanogan.	1,765	2	44.2	76	1	19	29†	43	0.60	0.27	2.0	0	7	17	7	7	Methow Trading Co.			
Yacolt.	Clarke.	850								8.52	2.02	0	12	15	0	16	sw.				
Yale.	Cowlitz.	375	6	50.3	81	1	31	6	34	7.24	1.75	0	16	12	4	15	C. R. Miller.				
Oregon.																	J. A. Williams.				
Agency Plains.	Crook.	2,363	...	41.3	65	11†	22	25	31	0.49	0.25	0	2	17	0	14	nw.				
Albany.	Linn.	212	31	51.2	— 1.5	76	1	31	28	36	3.65	+ 0.49	1.65	0	13	2	6	W. S. Williams.			
Ashland.	Jackson.	1,956	29	51.9	— 2.0	79	1	28	15	40	0.40	- 1.04	0.18	0	3	23	nw.				
Astoria.	Clatsop.	16	52	52.9	— 1.7	70	1	40	16	20	5.27	- 0.79	1.40	0	17	7	9	Irving Club.			
Austin.	Grant.	4,250	2	40.0	73	2	17	15	48	2.32	1.67	8.0	10	6	11	12	U. S. Forest Service.				
Baker.	Baker.	3,466	23	43.0	— 2.5	72	2	24	28	37	1.07	+ 0.16	0.93	0.7	6	11	9	U. S. Weather Bureau.			
Bend.	Crook.	3,629	8	45.0	78	23	10	4	48	0.24	0.20	0	3	21	5	5	Bend Bulletin.				
Black Butte.	Lane.	1,200	12	48.4	— 2.2	68	1	32	2	31	3.70	+ 0.45	1.75	0	8	21	5	William Harris.			
Bialock.	Gilliam.	237	15	54.4	— 2.8	80	1	32	29	36	1.07	+ 0.50	0.67	0	2	11	7	Geo. W. Long.			
Brookings.	Curry.	130		56.8	84	18	39	5	41	5.02	3.20	0	6	20	6	5	Dr. C. E. Saunders.				
Burns.	Hearney.	4,157	22	46.7	+ 1.1	72	1	16	14	47	1.63	+ 1.06	0.64	0	4	11	12	J. C. Welcome, Jr.			
Camp Creek.	Crook.																E. W. Nelson.				
Cascade Locks.	Hood River.	100	23	51.7	— 2.5	75	1	36	5	27	8.05	+ 1.55	1.84	0	15	16	1	Val W. Tomkins.			
Cazadero.	Clackamas.	503	4	52.2	80	1	31	17†	42	6.35	2.75	0	14	9	9	13	Alf Drill.				
Central Point.	Jackson.																A. C. Fiero.				
Chiloquin.	Klamath.	4,200	43.0	78	2	12	5	53	0.42		0.14	T.	7	21	5	5	H. W. Hincks.				
Clear Lake.	Linn.	3,030	43.2	72	1	26	2	39	7.31		2.80	0	16	12	4	15	Geo. W. Hawley.				
Cliff.	Lake.	4,300	6	52.7	— 1.1	75	1†	32	3	33	3.38	+ 0.16	0.16	0	2	17	9	5	John C. Green.		
Combs Flat.	Crook.	4,027	40.4	71	2†	12	25	48	1.13		0.69	1.9	4					J. R. Breese.			
Condon.	Gilliam.	2,884	6	42.1	80	23	9	25	61	0.35	0.35	T.	1	15	3*	8e	C. F. Kennedy.				
Corvallis.	Benton.	266	25	42.1	80	23	9	25	61	0.35								Oregon Agricultural College.			
Crescent.	Klamath.	4,400	1	42.1	80	23	9	25	61	0.35								W. W. Cryder.			
Culver.	Crook.																O. C. Young.				
Dayville.	Grant.	2,200	19	45.8	— 5.4	77	2	22	28†	48	0.55	- 0.31	0.12	0	10	15	8	J. Campbell-Martin.			
Deadwood.	Lane.	350	3	53.0*	75b	2	34b	29	30b	6.44	2.26	0	14	10b	9b	10b	Supt. salmon hatchery.				
Doraville.	Columbia.	600	11	49.0	— 2.9	71	1	33	16	26	3.91	+ 0.32	0.95	0	15	8	9	Jos. Hackenberg.			
Drain.	Douglas.	300	11	53.6	— 1.1	75	1†	32	3	33	3.38	+ 0.16	1.66	0	9	7	12	Ira Wimberley.			
Echo.	Umatilla.	625	9	50.9	81	2	28	29	39	1.87		1.12	0	6	14	5	12	R. B. Stanfield.			
Ella.	Morrow.	830	9	51.8	80	1	28	28†	38	1.93	+ 1.21	0.85	0	5	24*	2*	4*	C. F. Troedson.			
Eugene.	Lane.	449	23	53.4	— 0.3	76	1	35	5†	31	2.74	- 0.10	0.75	0	15	10	4	17	Paul G. Bond.		
Folly Farm.	Maheur.	3,710	42.4	87	18	10	5†	64	0.72		0.53	0	3	21	7	3	W. R. Gardner.				
Forest Grove.	Washington.	220	24															Pacific University.			
Glass Buttes.	Crook.	4,200	54.4	90	7†	15	30	55	0.20		0.20	0	1	22	8	1	w.	C. J. Stauffer.			
Glendale.	Douglas.	1,441	9	55.0	90	1	32	2	50	1.27	0.50	0	4	14	7	10	Carl Olson.				
Glenora.	Tillamook.	575	22	48.2	— 2.6	71	2	28	5†	35	8.21	— 1.66	1.50	0	15	17	3	Mrs. J. A. Reeker.			
Grandview.	Crook.			47.9	79	20†	22	25	44	0.36	0.17	0	4	19	8	4	R. E. Osborn.				
Grants Pass.	Josephine.	956	25	53.4	— 0.5	85	1	26	15	49	0.20	- 1.93	0.10	0	4	17	8	6	John B. Paddock.		
Grass Valley.	Sherman.	2,381	12	47.8	— 0.4	80	20†	22	28	49	1.83	+ 1.14	0.87	0	5	16	8	2	Miss Belle Ely.		
Gurdane.	Umatilla.	3,500	3	43.5	74	2	20	28	35	1.13		1.03	0	5	13	16	11	Portland water works.			
Headworks.	Clackamas.	719	11	50.6	— 0.9	77	5	31	5†	37	7.57	+ 1.49	2.28	0	14	13	11	John A. Hoffman.			
Heppner.	Morrow.	1,950	23	48.1	32	79	2	28	25†	37	2.75	+ 1.65	1.21	0	9	12	14	C. W. Kallogg.			
Hermiston.	Umatilla.	451	6	51.3	81	2	25	29	47	1.37		0.50	0	7	13	9	9	Edward W. Birge.			
Hood River.	Hood River.	300	23	51.6	— 0.1	81	1	30	24	44	2.01	- 0.56	1.30	0	6	12	5	C. C. Starring.			
No. 2.	Marion.	485	1	51.6	79	1	31	29	39	2.85		0.94	0	10	5	19	7	U. A. Newman.			
No. 3.	Marion.	620	1	49.8	81	1	27	29	49	2.52		0.85	0	10	8	22	P. L. Smith.				
No. 4.	Marion.	850	1	48.8	76	1	27	29	40	2.83		0.85	0	7	16	7	F. S. Bubb.				
Huntington.	Baker.	2,165	12	48.0	— 4.3	87	1	24	28†	45	5.53	+ 5.07	4.07	0	20	7	14	Claude Cone.			
Imperial.	Crook.			41.5	76	23	5	28	59	0.65		0.20	0	8	19	2	10	E. Britt.			
Jacksonville.	Jackson.	1,640	25	53.3	— 0.2	82	1	30	18	41	0.90	- 0.87	0.54	0	4	21	4	F. F. McCully.			
Joseph.	Wallace.	4,400	24															Augusta J. Hayden.			
Klamath Falls.	Klamath.	4,100	24	48.3	— 0.9	77	2†	21	15	40	0.32	- 0.74	0.24	T.	3	20	7	4	W. A. Benham.		
La Grande.	Union.	2,784	25	46.2	— 3.6	77	2	27	15	37	3.05	+ 1.40	1.50	0	9	17	5	J. W. Brown.			
Laidlaw.	Crook.	3,171	48.1	80	11	20	4†	50	0.77		0.30	0	5	20	7	4	C. C. Gott.				
Lakeview.	Lake.	4,950	30	47.8	— 0.9	83	23	17	4†	47	0.06	- 0.90	0.04	T.	2	20	4	6	Albert Larson.		
La Pine.	Crook.	4,230	42.0	77	2	13	29	49	1.91		0.80	0	5	18	7	6	Geo. Frissell.				
McKenzie Bridge.	Lane.	1,400	12	51.8	— 0.2	87	23	25	29	59	7.46	+ 1.96	2.82	0	20	6	4	M. E. Pettit.			
McMinnville.	Yamhill.	182	26	53.5	+ 0.8	79	1	30	28	42	2.84	- 0.55	0.90	0	10	14	2	U. S. Weather Bureau.			
Marshfield.	Coos.	34	12	54.4	+ 0.1	85	19	32	5	37	1.49		2.18	0	12	17	4	J. W. Palmer.			
Meadow Brook Ranch.	Hood River.	850	1	49.6*	74*	1	29*	29	36	3.86		1.23	0	14	12	15	U. S. Weather Bureau.				
Medford.	Jackson.	1,425	3	53.2	82	1	30	5†	43	0.62		0.32	0	6	16	11	4	U. S. Reclamation Service			
Merrill.	Klamath.	4,070	8	45.4	— 75	1†	18*	15	45	0.33		0.12	0	5	29	0	2	John A. Hoffman.			
Metolius.	Crook.	2,525	3	47.0	84	23	18	25	50	0.21		0.11	0	2	18	4	9	G. Muecke.			
Miramont Farm.	Clackamas.	195	25	50.9	— 1.7	74	1	30	5	35	3.43	+ 0.33	1.03	0	11	13	9	Dr. Urban Fisher.			
Mount Angel.	Marion.	485	27	52.4	— 0.8	73	1	38	5	28	4.14	+ 0.47	1.20	0	11	13	6	Isaac Seal.			
Mount Hood.	Hood River.	1,450	2	45.8	75	1	24	28†	46	4.39		1.50	0	12	18	11	2	Alex Lundberg.			
Musick.	Douglas.	5,000	4	45.7	75	2	21	29	38	5.07		1.45	4.0	0	10	12	7	William Mathews.			
Newport.	Lincoln.	69	26	51.1	— 3.1	69	19	37</td													

TABLE 1.—Climatological data for October, 1913. District No. 12—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.							Sky.	Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
<i>Oregon—Continued.</i>																				
Roseburg.....	Douglas.....	510	35	53.4	+ 0.6	75	1	38	15	33	1.76	- 0.85	0.87	0	10	4	20	s.	U. S. Weather Bureau.	
Salem.....	Marion.....	120	23	51.3	- 2.3	78	1	35	4	34	2.78	- 0.30	0.82	0	9	13	2	16	s.	H. A. Hoffman.
Seneca.....	Grant.....	4,800	2	38.9 ^a	.....	75 ^a	2	14 ^a	3 ^a	60 ^a	1.37	.....	1.16	0	3	16 ^a	6 ^a	8 ^a	nw.	E. J. Southworth.
Silver Lake.....	Lake.....	4,700	16	.....	.....	.....	.....	15	10	.....	0.08	- 0.57	0.08	1	22 ^a	8 ^a	9 ^a	nw.	G. W. Marvin.	
Siskiyou.....	Jackson.....	4,115	5	48.0	.....	68	2 ^b	28	4	27	0.50	.....	0.16	T.	6	19	9	3	nw.	U. S. Weather Bureau.
Sparta.....	Baker.....	4,150	22	42.4	- 5.1	72	1	24	16	37	1.05	- 0.29	0.60	10.0	3	18	10	3	w.	J. A. Wright.
Stafford.....	Clackamas.....	400	17	51.6	- 2.2	76	1	34	5	30	4.45	+ 0.74	0.98	0	13	.....	.....	.....	ne.	John P. Gage.
Table Rock.....	Jackson.....	1,215	.....	53.0	.....	88	1	26	57	56	0.79	.....	0.48	0	6	21	5	5	nw.	Mrs. J. C. Pendleton.
Talent.....	.....do.....	1,800	52.8	.....	.....	82	1	29	15	43	0.25	.....	0.10	0	4	18	5	8	nw.	T. F. Smith.
The Dalles.....	Wasco.....	112	39	53.7	+ 1.2	78	2	30	29	34	1.05	+ 0.42	0.78	0	10	10	6	15	w.	Judd S. Fish.
Tillamook.....	Tillamook.....	52.4 ^a	.....	73 ^a	19	31 ^a	16	35 ^a	7.82	.....	1.87	.....	0	15	12	7	12	nw.	Will Spalding.	
Toledo.....	Lincoln.....	75	23	54.1	- 0.4	76	1	32	4 ^c	36	9.05	+ 3.75	2.50	0	11	19	6	6	w.	C. B. Crosno.
Umatilla.....	Umatilla.....	340	25	51.4	- 2.9	81	2	32	28 ^a	40	1.24	+ 0.53	0.65	0	7	14	1	16	e.	Mrs. H. T. Duncan.
Union.....	Union.....	2,787	2	44.0	.....	71	23	22	28	42	2.10	.....	1.12	0	11	13	6	12	nw.	Robert Withycombe.
Vale.....	Malheur.....	2,242	21	46.8	- 1.6	85	2	18	29	54	0.93	+ 0.33	0.59	0	5	23	6	2	e.	H. P. Osborne.
Van.....	Harney.....	3,506	2	.....	.....	76	1	34	4	34	6.42	.....	2.62	0	13	13	5	13	.....	George Howe.
Vida.....	Lane.....	1,100	2	51.5	.....	76	1	34	4	34	6.42	.....	2.62	0	13	13	5	13	w.	W. H. Pendell.
Waldo.....	Josephine.....	1,900	1	51.0 ^a	.....	77 ^a	1 ^b	29 ^a	15	36 ^a	1.55	.....	0.86	0	7	19	7	5	n.	W. H. Wittrock.
Waldo Lake.....	Lane.....	5,405	.....	76	1	31	5	33	.....	.....	3.65	.....	0.90	0	9	3	17	11	.....	Simon Klovahl.
Wallace Orchard.....	Folk.....	170	4	50.4	.....	72	1	31	5	33	3.65	.....	0.90	0	9	3	17	11	.....	Chas. A. Park.
Wallowa.....	Wallowa.....	2,935	10	42.8	- 4.0	79	2	23	15 ^a	48	2.72	+ 1.12	1.05	3.0	10	11	3	12	w.	L. Couch.
Warmic.....	Wasco.....	1,500	12	49.2	.....	80	23	21	3	48	2.10	.....	1.40	0	5	10	12	9	w.	A. J. Swift.
Warmspring.....	Crook.....	1,500	11	49.2	- 2.2	79	23	24	24	50	0.87	+ 0.18	0.45	T.	9	7	13	11	w.	Geo. W. Robbins.
Wasco.....	Sherman.....	1,263	.....	50.7	.....	77	1	34	16	33	1.44	.....	0.69	0	5	21	8	2	w.	J. R. Howell.
Westfall.....	Malheur.....	3,000	2	.....	.....	77	1	34	16	33	1.44	.....	0.69	0	4	21	8	2	.....	Dr. H. J. Schenk.
Weston.....	Umatilla.....	1,800	21	47.0	- 3.1	76	22	26	29	30	3.24	+ 1.40	1.70	0	8	13	2	16	s.	M. A. Baker.
Whitaker.....	Crook.....	4,250	2	40.2	.....	77	23	5	25	58	0.22	.....	0.08	0	3	18	8	5	sw.	Frank Percival.
Williams.....	Josephine.....	1,368	21	52.2	- 0.2	84	1	25	15	51	0.41	- 1.74	0.21	0	4	27	1	3	n.	Francis J. LeRoy.
Yonma.....	Klamath.....	4,146	6	44.8	.....	80	2	9	31	56	0.36	.....	0.10	T.	4	11	15	5	nw.	Ward Rueck.

^a, ^b, ^c, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.

† Also on other dates.

T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for October, 1915. District No. 12, Columbia Valley.*

TABLE 2.—*Daily precipitation for October, 1913. District No. 12—Continued.*

Stations.	Watershed.	Day of month.																													Total.				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
<i>Idaho—Continued.</i>																																			
Mackay.....	Lost River Region.			T.	T.	T.	T.																											T.	
Malad.....	Malad.																																		
Meridian.....	Boise.																																		T. 1.51
Mesa ||.....	Weiser.																																		T. 2.00
Middle Fork.....	Clearwater.																																		0.91
Milner.....	Snake.																																		
Moore.....	Lost River Region.																																		
Moscow.....	Palouse.																																		T. 2.36
Mountainhome.....	Snake.																																		1.04
Murtaugh ||.....	do.																																		1.08
New Meadows.....	Salmon.																																		T. 2.22
Nezperce.....	Clearwater.																																		T. 1.91
Oakley.....	Snake.																																		T. 0.92
O'Hare Bar.....	Clearwater.																																		
Orofino.....	do.																																		T. 3.06
Paris.....	Bear.																																		0.92
Payette.....	Payette.																																		T. 0.92
Pierson.....	Salmon.																																		0.35
Pine.....	Boise.																																		T. 1.77
Pleasant Valley.....	do.																																		T. 1.36
Pocatello.....	Port Neuf.																																		T. 0.98
Pocatello Nursery.....	do.																																		
Poplar.....	Snake.																																		T. 1.51
Porthill.....	Kootenai.																																		T. 0.57
Priest River Experiment stations:																																			
No. 1.....	Pend Oreille.																																		.03 1.68
No. 2.....	do.																																		.04 1.65
No. 3.....	do.																																		.05 1.74
Pyle Creek.....	Payette.																																		T. 3.19
Richfield.....	Big Wood.																																		T. 0.65
Rogerson.....	Snake.																																		
Roseberry.....	Payette.																																		T. 0.65
Rupert.....	Snake.																																		T. 0.64
St. Anthony.....	do.																																		
St. Maries.....	St. Joe.																																		
St. Michaels Priory.....	Clearwater.																																		T. 1.92
Salmon.....	Salmon.																																		T. 0.37
Sandpoint.....	Pend Oreille.																																		T. 1.85
Sheep Hill.....	Boise.																																		T. 3.06
Shoshone.....	Big Wood.																																		T. 0.54
Silver City.....	Owyhee.																																		T. 1.16
Soldier Creek.....	Big Wood.																																		T. 2.11
Spirit Lake.....	Pend Oreille.																																		T. 0.55
Springfield.....	Snake.																																		T. 2.21
Spring Hill.....	Boise.																																		T. 0.54
Sugar ||.....	Snake.																																		T. 1.32
Tripod Mountain.....	do.																																		T. 2.28
Twin Falls.....	Snake.																																		T. 1.35
Upper Lost River.....	Lost River.																																		T. 0.66
Vernon.....	Snake.																																		
Wallace.....	C. d'Alene.																																		
Weiser.....	Weiser.																																		T. 1.04
Wendell.....	Big Wood.																																		T. 0.78
Weston.....	Bear.																																		T. 1.18
<i>Washington.</i>																																			
Aberdeen.....	Coast.	.06	.85	.05	.06	1.05	.98	.41	1.30																							.24 5.50			
Anacortes.....	Puget Sound.	.40	.50	.33	.08	.03	1.05	.22	.05																							.15 4.75			
Anatone.....	Snake.	.22	.95	.15																														.14 2.50	
Baker.....	Puget Sound.	.20	.30	.60	.30	1.90	1.50	.70	1.70																						.20 9.10				
Bellingham.....	do.	.02	.41	.36	.06	.09	1.43	.21	.02	.52																					.44 4.46				
Bellingham (near).....	do.																																		
Blaine.....	do.																																		T. 5.90
Blewett.....	Wenatchee.																																		
Bremerton.....	Puget Sound.	.12	.20	.18																															T. 1.53
Brewster.....	Columbia.	.04	.65	.13																														.09 1.01	
Buckley.....	Puget Sound.	.30	.78	.23	.59	.06	.22	.04																									.22 5.17		
Bumping Lake.....	Yakima.																																		
Centralia.....	Coast.	.40	.25	.23	T.	.32	.10																										.15 2.67		
Clearbrook.....	Puget Sound.	.44	.42	.20	.24	.25	.15	.26	.08																							.40 7.25			
Cle Elum.....	Yakima.																																		

TABLE 2.—*Daily precipitation for October, 1913. District No. 12—Continued.*

TABLE 2.—*Daily precipitation for October, 1913. District No. 12—Continued.*

Stations.	Watershed.	Day of month.																																		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total			
Oregon—Continued.																																				
Black Butte.	Willamette.																																	.15	3.70	
Blalock.	Columbia.																																	T.	1.07	
Blue Mt. Sawmill.	Umatilla.																																	.10	6.01	
Brogan.	Malheur.																																	T.	5.02	
Brookings.	Coast.																																	T.	3.30	
Buena Vista.	Snake.																																	.34	1.63	
Burns.	SE. drainage.																																	2.00		
Burns Mill.	do.																																			
Butte Falls.	Rogue.																																	.03	1.90	
California Gulch.	Umatilla.																																	.05	3.94	
Camp Creek.	Deschutes.																																			
Cascade Locks.	Columbia.																																	.27	.04	
Cascadia.	Willamette.																																	.80	.84	
Cazadero.	do.																																	.02	7.40	
Central Point.	Rogue.																																	.52	.16	
Chiloquin.	Klamath.																																	.25	6.35	
Christmas Lake.	SE. drainage.																																	.05	0.42	
Clear Lake.	Willamette.																																	T.		
Cliff.	SE. drainage.																																	.05	0.31	
Columbia Mine.	Snake.																																	T.	.61	
Condon.	John Day.																																	T.	3.45	
Coquille River Lt.H.	Coast.																																	T.	4.44	
Cornucopia.	Snake.																																	T.	2.20	
Corvallis.	Willamette.																																	T.		
Cracker Creek.	Snake.																																	T.	1.41	
Crescent.	Deschutes.																																	.35		
Culver.	do.																																			
Dayville.	John Day.																																	.03	.08	
Deadwood.	Coast.																																	.09	.05	
Diamond.	SE. drainage.																																	.44	6.44	
Doraville.	Columbia.																																	T.		
Drain.	Umpqua.																																	.16	3.38	
Dufur.	Columbia.																																	T.		
Echo.	Umatilla.																																	.04	1.45	
Ella.	Columbia.																																	T.		
Embody.	SE. drainage.																																	.60		
Eugene.	Willamette.																																	.05	0.45	
Fair Glen.	Coast.																																	.20	2.74	
Florence.	do.																																	.09	4.71	
Follyfarm.	Malheur.																																	.63	5.38	
Forest Grove.	Willamette.																																	T.		
Fort Rock.	SE. drainage.																																	T.	0.11	
Galice.	Rogue.																																	T.	1.11	
Gardiner.	Umpqua.																																	T.		
Gibson.	Umatilla.																																	T.	4.60	
Glassbutte.	Deschutes.																																	.20	0.20	
Glencoe.	Columbia.																																	T.		
Glendale.	Umpqua.																																	.50	2.35	
Glenora.	Coast.																																	T.		
Golden Falls.	do.																																	.74	8.21	
Grants Pass.	Rogue.																																	T.	0.20	
Grass Valley.	John Day.																																	.28	1.83	
Greenhorn.	Snake.																																	.37		
Gumbot.	do.																																	.30		
Gurdane.	Columbia.																																	.11		
Happy Home.	Umpqua.																																	.13		
Hazel Dell.	Willamette.																																	.06	4.85	
Headworks.	do.																																	.56	7.57	
Heppner.	Columbia.																																	.50	2.75	
Hermiston.	Umatilla.																																	.39	0.06	
Hilgard.	Gnd. Ronde.																																	.20	10.10	
Hood River.	Columbia.																																	.20		
No. 2.	do.																																	.02	2.85	
No. 3.	do.																																	.06	2.52	
No. 4.	do.																																	T.	2.83	
Hoover.	Willamette.																																	.17	7.79	
Howardville.	Gnd. Ronde.																																	.40	3.46	
Huntington.	Snake.																																	.01	3.03	
Imperial.	Deschutes.																																	.10	0.65	
Ironside.	Snake.																																	.05		
Jacksonville.	Rogue.	</																																		

TABLE 2.—*Daily precipitation for October, 1915. District No. 12—Continued.*

* Precipitation included in that of the next measurement.

† Separate dates of falls not recorded.

Precipitation for the 24 hours ending on the morning when it is measured.
T Precipitation is less than 0.01 inch rain or melted snow.

T. Precipitation is less than 0.01 inch rain or melted snow.

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TABLE 3.—Maximum and minimum temperatures at selected stations for October, 1913. District No. 12, Columbia Valley.

Date.	Montana.				Afton, Wyo.	Idaho.																Vernon.		Wallace.				
	Kalispell.		Missoula.			Boise.		Bonners Ferry.		Hotspring.		Lewiston.		Mackay.		New Meadows.		Pocatello.		Salmon.		Shoshone.		Vernon.		Wallace.		
	Max.	Min.	Max.	Min.		Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	
1....	87	32	74	30	70	26	71	43	65	35	73	42	76	42	70	37	76	21	74	38	75	30	74	32	73	34		
2....	78	33	81	36	73	28	74	45	63	36	82	43	79	44	72	37	74	20	77	41	80	29	76	36	73	32		
3....	61	35	66	36	69	34	64	42	62	29	70	44	64	42	70	36	65	24	69	42	71	34	67	40	63	32		
4....	44	36	55	31	63	34	50	36	39	29	70	31	51	43	65	24	46	28	55	34	69	30	53	31	60	34		
5....	46	31	43	34	41	23	49	31	43	26	55	33	58	40	42	23	43	24	43	33	43	35	47	29	42	28		
6....	42	31	46	31	41	24	49	31	47	31	54	30	55	41	42	22	40	16	43	32	48	25	46	25	35	27		
7....	43	30	43	33	41	26	51	41	41	23	55	45	56	43	50	29	38	24	45	38	42	32	47	37	33	30		
8....	46	33	51	34	46	34	52	41	40	34	60	45	55	45	53	30	48	31	46	37	52	33	49	42	50	37		
9....	42	32	44	32	44	27	48	33	55	34	46	35	56	42	45	28	48	30	38	33	45	32	45	31	48	30		
10....	39	25	43	34	40	23	50	31	54	24	55	37	46	20	43	17	45	32	52	26	48	25	39	27	45	33		
11....	55	35	60	37	54	29	67	44	45	24	70	44	69	49	63	34	68	32	61	41	66	40	64	35	56	33		
12....	70	37	73	36	63	24	75	43	60	25	79	47	70	44	64	32	68	25	68	42	76	27	71	41	66	30		
13....	56	38	58	33	64	29	66	40	60	34	70	50	61	45	68	35	55	28	70	45	67	34	69	40	65	30		
14....	48	28	50	34	52	24	51	32	48	29	58	30	59	36	62	22	50	12	47	31	50	26	79	26	68	27		
15....	38	19	41	20	49	22	53	29	40	26	59	27	47	32	45	19	39	12	50	26	51	16	50	19	58	24		
16....	47	24	45	30	47	23	52	36	46	28	58	35	54	35	50	22	53	25	52	35	53	31	51	21	51	21		
17....	42	20	39	34	47	18	55	31	44	24	60	29	47	33	49	21	49	15	48	37	45	14	52	22	65	41		
18....	45	32	40	34	43	27	59	40	48	33	64	40	54	40	52	36	44	34	52	42	49	36	58	37	43	28		
19....	49	32	53	37	48	32	65	39	48	34	61	35	59	35	61	30	61	34	60	36	63	32	53	34	55	31		
20....	49	28	60	30	57	29	69	42	52	35	63	32	60	36	62	32	68	21	65	35	60	22	64	30	60	36		
21....	61	35	50	44	47	27	63	43	60	38	65	32	64	41	58	39	63	27	61	47	65	33	60	41	46	20		
22....	58	30	60	28	55	24	62	69	57	32	70	40	66	38	66	33	65	17	59	38	66	21	60	28	60	26		
23....	60	33	65	31	60	21	69	41	58	38	71	33	68	37	62	28	54	18	66	38	65	20	67	30	55	30		
24....	51	30	56	43	68	24	69	42	59	42	75	34	51	42	65	30	72	22	72	43	63	25	70	31	65	27		
25....	44	25	46	32	52	31	54	35	53	24	72	35	56	34	62	33	64	26	51	28	57	34	63	30	58	28		
26....	36	25	46	32	50	15	54	36	43	28	62	34	51	38	52	19	52	17	55	20	54	17	53	31	45	15		
27....	46	26	45	28	47	16	53	31	45	22	65	32	57	35	53	18	58	29	54	37	54	30	57	36	48	31		
28....	41	23	48	25	47	16	53	31	45	22	58	21	53	31	47	21	51	14	49	26	52	15	49	25	45	18		
29....	44	27	52	27	52	13	57	30	50	21	60	21	56	30	59	19	61	13	57	26	59	24	56	20	50	17		
30....	45	22	50	32	52	26	57	35	50	23	65	26	54	30	51	24	56	16	60	26	54	17	61	36	55	23		
31....	42	22	42	25	62	29	56	38	43	20	68	31	49	36	54	27	47	20	62	39	57	23	64	33	56	30		
Mns.	49.5	29.2	52.4	32.4	52.9	25.5	58.7	37.2	50.8	29.6	64.4	35.1	58.6	38.5	56.9	27.7	55.5	23.3	56.6	34.9	53.1	27.4	58.8	31.7	54.8	28.4		

Date.	Weston, Idaho.		Washington.																Port Crescent.		Seattle.		Sixprong.		Spokane.		Tacoma.	
			Aberdeen.		Blaine.		Colville.		Kosmos.		Lakeside.		North Head.		North Yakima.		Odessa.		Seattle.		Sixprong.		Spokane.		Tacoma.			
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
1....	78	43	40	61	36	73	32	75	37	74	44	58	51	75	38	73	33	56	36	66	47	73	54	71	40	65	42	
2....	81	35	43	61	42	73	31	66	44	75	44	54	50	77	39	75	38	59	44	60	48	81	44	73	40	58	43	
3....	75	43	40	58	44	62	37	54	35	65	44	53	48	68	33	61	28	52	35	51	43	60	40	58	39	56	43	
4....	61	39	35	60	52	56	37	57	38	58	41	53	47	54	36	50	28	52	31	57	42	56	37	49	36	56	40	
5....	45	27	31	56	28	54	25	61	30	62	33	56	47	66	31	52	30	57	39	44	56	40	58	35	58	35	55	35
6....	43	28	45	51	34	49	32	58	35	53	37	54	50	55	38	52	33	48	44	49	46	55	43	50	39	48	45	
7....	50	30	40	56	41	54	36	61	38	59	36	57	60	56	37	54	37	52	39	54	46	53	38	53	45	52	45	
8....	47	40	37	53	42	53	40	50	42	54	41	55	47	58	35	56	40	53	36	53	47	52	42	49	38	54	43	
9....	46	38	36	53	27	54	36	48	38	57	36	55	50	58	33	56	32	53	32	55	43	57	42	51	38	55	41	
10....	49	27	34	50	42	49	26	54	40	49	41	55	47	60	40	50	32	42	36	45	59	43	50	36	44	36	44	
11....	63	35	54	58	44	53	33	60	47	71	39	54	53	75	50	67	47	58	51	63	54	60	46	64	49	63		

TABLE 3.—*Maximum and minimum temperatures at selected stations for October, 1913. District No. 12—Continued.*

Date.	Washington.				Oregon.																The Dalles.		Vale.			
	Tatoosh Island.		Walla Walla.		Ashland.		Baker.		Eugene.		Hermiston.		Marshfield.		Portland.		Port Orford.		Prineville.		Roseburg.		The Dalles.		Vale.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1.....	60	48	75	49	79	39	70	33	76	45	77	32	73	41	75	50	71	53	77	28	75	42	77	41	80	35
2.....	57	50	77	50	76	43	72	38	74	44	81	34	64	48	68	50	64	53	80	32	72	44	78	44	85	31
3.....	56	45	61	42	66	45	57	34	67	36	73	29	63	39	58	41	64	46	62	22	62	42	68	43	76	46
4.....	59	42	48	42	55	34	45	28	66	38	59	44	62	40	60	42	42	28	59	42	65	42	60	40	66	29
5.....	55	42	58	38	57	32	43	31	65	35	64	36	64	32	61	38	60	31	61	40	68	40	59	27		
6.....	52	46	53	42	55	36	43	31	64	45	57	36	55	45	56	47	54	45	50	30	55	45	67	45	53	24
7.....	53	45	49	41	63	45	44	36	58	52	54	44	58	51	60	51	56	50	53	44	59	50	64	44	59	42
8.....	53	45	55	44	55	45	49	32	66	44	60	43	62	49	58	48	61	46	55	27	57	45	62	42	52	34
9.....	50	43	55	43	55	37	46	31	60	41	62	44	60	45	60	46	58	43	54	25	58	43	61	43	52	37
10.....	52	44	58	42	61	32	44	28	61	44	58	39	63	42	59	49	64	42	58	31	63	45	70	52	55	25
11.....	54	50	73	55	69	32	59	36	70	46	75	52	70	45	66	50	60	45	77	40	70	46	76	55	68	33
12.....	53	47	72	49	68	33	66	39	68	44	73	37	65	38	66	48	56	42	74	32	67	48	70	43	71	30
13.....	51	46	59	45	60	32	62	33	65	46	61	50	61	46	57	45	57	49	70	39	58	42	65	44	65	43
14.....	52	43	56	42	55	38	46	28	61	38	60	53	54	38	59	43	58	40	55	25	55	41	62	38	59	25
15.....	55	43	53	40	51	28	46	25	55	40	58	53	56	38	52	45	54	41	52	23	51	38	55	41	57	20
16.....	52	43	55	40	58	39	48	30	55	39	57	29	66	46	54	44	59	49	56	33	61	50	56	35	60	29
17.....	51	46	52	36	66	41	49	26	70	46	63	29	68	47	59	44	61	50	64	30	68	50	57	36	56	23
18.....	53	46	68	51	69	39	59	40	67	43	73	41	71	50	63	52	70	51	72	33	63	47	73	44	67	35
19.....	55	48	66	43	75	40	65	36	62	45	67	53	85	48	68	48	83	56	78	30	69	48	70	41	77	32
20.....	51	47	64	46	75	41	64	34	71	40	66	33	67	44	57	48	66	46	77	31	72	49	71	41	71	30
21.....	53	47	65	51	69	39	57	39	66	47	70	48	62	48	61	49	61	46	70	31	66	47	73	55	68	38
22.....	54	48	71	49	71	40	62	31	66	42	72	50	70	40	64	45	68	49	77	30	62	45	74	40	74	28
23.....	54	50	76	56	74	40	67	33	62	41	78	34	65	43	63	46	65	49	80	31	63	45	74	42	70	27
24.....	56	45	62	47	70	39	63	35	63	42	65	43	61	43	61	49	68	49	62	27	59	46	72	51	69	27
25.....	53	47	51	34	71	34	47	29	64	41	59	30	74	33	60	44	78	46	61	20	64	44	61	35	64	37
26.....	54	46	55	39	69	39	50	33	61	42	51	34	69	44	53	47	65	45	60	22	67	43	54	37	51	28
27.....	52	46	56	42	70	40	50	27	62	41	58	44	66	49	55	42	63	48	65	30	64	45	67	46	62	27
28.....	49	46	56	37	72	37	51	24	60	44	58	27	73	42	62	42	73	46	64	22	62	44	59	32	57	24
29.....	56	46	48	34	72	37	55	24	60	35	61	25	65	42	62	41	65	43	58	20	54	40	58	30	58	18
30.....	58	47	52	35	71	38	53	28	60	39	57	29	69	45	60	44	61	51	54	25	51	43	58	34	58	22
31.....	53	47	48	39	60	47	52	33	61	43	53	38	61	52	54	48	57	51	55	25	62	48	53	43	56	33
Mns.....	53.7	45.9	59.6	43.3	65.7	38.1	54.3	31.8	63.9	42.8	63.5	39.1	65.2	43.7	60.4	46.0	63.3	46.8	63.6	28.9	62.2	44.7	65.5	41.9	63.5	30.1

*, b, *, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.